



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,267	11/17/2003	Finis Conner	021206-000710US	6476
20350	7590	07/28/2005	EXAMINER	
TOWNSEND AND TOWNSEND AND CREW, LLP TWO EMBARCADERO CENTER EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			WALSH, DANIEL I	
			ART UNIT	PAPER NUMBER
			2876	

DATE MAILED: 07/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/716,267

Applicant(s)

CONNER ET AL.

Examiner

Daniel I. Walsh

Art Unit

2876

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-10 is/are allowed.
- 6) ☒ Claim(s) 1-6, 11-14 and 17-23 is/are rejected.
- 7) ☒ Claim(s) 15 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Receipt is acknowledged of the Amendment received on 31 March 2004.

Claim Objections

2. Claim 19 is objected to because of the following informalities:

Re claim 19: Replace "claim 7" with -- claim 1 --, as claim 7 has been cancelled.

Re claim 19: Replace ",the third....host." with -- . --, as claim 19 only recites a first and second interface in the proceeding lines, and claim 20 appears to recite the limitations of the third interface.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was

made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1, 2, 11, 12, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirokawa et al. (US 4,672,182).

Re claim 1, Hirokawa et al. teaches a card (11) having a width, length, and thickness, a storage medium to store data (laser/magnetic memory 17), an IC device including security information (IC chip section 16,50), wherein the storage medium and IC are provided within the card (FIG. 3) and wherein the security information stored in the IC is used to authenticate an access request to the storage medium (col 3, lines 62+). The Examiner notes that though the prior art is silent to the ratio of length to thickness being 5:1, that it is obvious and well known in the art that transaction cards/IC cards/credit cards are of such a form factor to facilitate convenience of storage, for example. The Examiner notes that the card is flexible, because it has both laser/magnetic memory, and also an IC memory. The claims fail to recite "flexible" as being limited to/related to bending of the card. Therefore, as the card is seen having two different types of memories, it is seen as flexible. In addition, the Examiner notes that actual physical flexibility of IC/smart/credit cards is also well known and conventional in the art for durability, as such cards undergo degrees of stress, it is obvious that they are made with materials that are somewhat flexible, to make the cards robust (see Hoppe et al. US 4,550,248) which teaches flexible IC cards).

Re claim 2, the Examiner notes that the limitations have been discussed above re claim 1. Additionally, Hirokawa et al. teaches a slot to receive the card and access the storage medium (slot 10), the reader including a first interface configured to interface with the IC (IC chip

reader/writer 21), a second interface to interface with the storage medium (22). Though silent to a third interface to interface with a host, the Examiner notes that the slot 10 is connected to a system/computer 1. Accordingly, it is obvious that it communicates with the system/processor, as is conventionally done through an interface (wired/hard wired, etc.).

Re claims 11-12, Hirokawa et al. teaches the IC includes a memory, a security information storage area for storing the security information, and a cryptography module (col 4, lines 1+ which teach that a ROM 51 is a memory and has a security information storage area (password data), and a cryptography module via encryption programs/key/data of ROM 51. Additionally, such teachings are well known (see Binder et al. US 6,578,678).

Re claims 1, and 17-18, though the prior art is silent to the dimensions of the card, the Examiner notes that one of ordinary skill in the art would have been motivated to use such a ratio, as to comply with ISO standards for IC/transaction cards/provide a card that is small/portable to be easily carried in a wallet, pocket, hand, etc. The Examiner also notes Pentz et al. (US 2002/0185543) as proof that traditional transaction cards/credit cards have the corresponding ration (see paragraph [0049]). The Examiner believes that such ratios are obvious to have in a transaction/credit card of the references above, to comply with conventional cards and standards of use, portability, etc.

Re claims 19 and 20, the limitations have been discussed above re claim 2.

4. Claims 3-6 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirokawa et al., as discussed above, in view of Gray et al. (US 2001/0000405).

Re claims 3-5, the teachings of Hirokawa et al. have been discussed above. Examiner notes that the reader includes security module coupled to the first interface and including a first processor cooperating with the IC to authenticate the access request (CPU 18).

Hirokawa is silent to the third interface being a USB interface.

Gray et al. teaches a card reader/writer with a USB connection (FIG. 1A). Gray et al. teaches the card conforms to ISO 7816 standards, (paragraph [004]+), as the Examiner notes that it is well known and conventional for such cards to comply with standards to be widely accepted. Though silent to fitting in a wallet sleeve, it is obvious that such cards are configured to fit in a wallet for convenience. Gray et al. also teaches a security module including a random number generator, encryption, and random access memory through the ROM 42a and RAM 42b. Gray et al. also teaches a first processor coupled to the interface and that processor 40 that cooperates to authenticate an access request, and thus these components are broadly interpreted to function as a security module. Though Gray et al. is silent to a second processor, the Examiner notes that the processor of Gray is functionally equivalent to two separate processors as claimed, in terms of what is accomplished. Accordingly, the Examiner notes that it would have been obvious to one of ordinary skill in the art at the time the invention was made, to have two separate processors, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. *Nerwin v. Erlichman*, 168 USPQ 177, 179. Additionally, the Examiner notes that such a matter appears to be a matter of design choice since it appears that one processor of the reader is more than capable of handling the functions as claimed of the two separate processors, and it appears the invention would perform equally well with one processor. Re claim 6, Gray et al. teaches a non-volatile storage medium (34), that the

slot is one a first edge of the reader, and the third interface is on the second edge (opposite to first) (FIG. 1A).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hirokawa et al. with those of Gray et al.

One would have been motivated to do this to have a reader/writer that is connectable using a conventional and well-known USB format for convenience/swappability, while also providing the known benefits of security features.

Re claim 21, the limitations have been discussed above re claim 3.

Re claim 22, the limitations have been discussed above re claim 4.

Re claim 23, the limitations have been discussed above re claim 5.

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirokawa et al., as discussed above, in view of Mawatari (US 2004/0195312).

Re claim 13, the teachings of Hirokawa et al. have been discussed above.

Hirokawa et al. is silent to memory being divided into insecure and secure parts.

Mawatari (US 2004/0195312) teaches the memory of an IC card is divided into public and private areas (insecure/secure) for handling data from different sources/applications (abstract and paragraph [0053]+).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hirokawa et al. with those of Mawatari.

One would have been motivated to do this to have a memory card with different security levels depending on the application/process being run, thus increasing security.

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirokawa in view of Gray et al. and Dilday et al. (US 6,484,940).

The teachings of Hirokawa et al. have been discussed above. As Hirokawa et al. teaches a laser/magnetic storage, Hirokawa et al. is silent to a disc.

Gray teaches a card with terminals 36, similar to the IC of Hirokawa et al., but Gray et al. teaches that the memory can be of various formats including magnetic disc, optical storage mediums, flash memory devices, etc. (paragraph [0029]).

Dilday et al. teaches a cover for moving in two directions (sheath 144) for accessing the storage medium. Though not a pin, the sheath is used to protect and expose the disk medium for handling and reading operations. Accordingly, it would have been an obvious matter of design variation to have a movable pin, as opposed to a movable sheath, as an alternative means to protect and provide access to a disk storage member. Moving the sheath by a pin/handle as opposed to an inset is well within the skill in the art, as an alternative means to actuate the covering.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to combine the teachings of Hirokawa et al. with those of Gray et al. and Dilday et al.

One would; have been motivated to do this in order to have a card with a disc storage medium that is less prone to causing jamming, protects/covers the memory, and is versatile.

Allowable Subject Matter

7. Claims 8-10 are allowed.

8. Claims 15 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: The reasons for allowance have been discussed in the previous Office Action.

Response to Arguments

10. Applicant's arguments with respect to claims 1-6 and 8-18 have been considered but are moot in view of the new ground(s) of rejection.

Re claim 1, The Examiner notes that the limitations of a card being flexible does not distinguish the current application from the prior art, especially as it is well known and conventional for cards (transaction, credit, etc) to be flexible to permit ease of transport, use, and to provide durability/resilience.

Re claim 2, the Examiner has cited the new art of Hirokawa et al. (cited above) teaches the new limitations of a third interface.

Re the limitations regarding the size/ratio of the cards, the Examiner notes that it is obvious to have such ratios with cards to have a portable card that is flexible, easy to transport, and complies with ISO standards and readers (see US 2002/0185543 paragraph [0047] for example).

Re the limitations that the card is flexible, the Examiner notes that the word flexible has various meanings. The Examiner interprets the cards of the prior art as flexible, as they contain different memories. Additionally, in regards to structural flexibility, the Examiner also notes that

it is well known and conventional for IC/credit/transaction cards to be made of a flexible material/substrate in order to be resilient and robust so as to be carried by a person and manipulated without being damaged (see Hoppe et al. US 4,550,248):

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Teng et al. (US 2003/0178486) which teaches a USB cable, Murashita (US 2005/0144354), Murashita (US 2005/0119979), Iijima (US 5,225,664), Kermode et al. (US 2003/0112781), Noble et al. (2003/0005300), West (US 5,845,891), Yamazaki (US 2005/0045729), Lauinger et al. (US 2005/0081367), Conner et al. (US 2003/0024995), Hoppe et al. (US 4,550,248), and Tsunoda et al. (US 2004/0232247).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel I. Walsh whose telephone number is (571) 272-2409. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

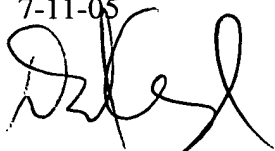
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel I Walsh

Examiner

Art Unit 2876

7-11-05




JARED J. FUREMAN
PRIMARY EXAMINER